

SECTION 096817
TEXTILE COMPOSITE FLOORING (*AD-03)

PART 1 GENERAL

1.01 REFERENCE STANDARDS

- A. AATCC Test Method 16 - Colorfastness to Light.
- B. AATCC Test Method 134 - Test Method for Electrostatic Propensity of Carpets.
- C. ASTM D2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials.
- D. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
- E. ASTM E662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
- F. CAL (CDPH SM) - Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers Version 1.2.
- G. CRI (GLP) - Green Label Plus Testing Program - Certified Products.
- H. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
- I. SCAQMD 1168 - Adhesive and Sealant Applications.

1.02 DEFINITION

- A. Textile Composite Flooring: A hybrid floor covering consisting of a tufted textured loop nylon or polyester fiber wear layer thermally fused to a cushioned polyester/polypropylene backing, commonly referred to as textile composite flooring (TCF), vinyl cushion tufted textile (VCTT), or tufted textile flooring.

1.03 SUBMITTALS

- A. Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns, colors available, and method of installation.
- B. Shop Drawings: Showing the extent of installation, seam direction of TCF, and accessories. Check pattern match, if any, for matching during installation and possible waste factors in ordering required amounts. Indicate built in items such as casework, columns, and doorways, and locations where cutouts are required in TCF.
 - 1. Maintain a copy of approved shop drawings on site during installation, available for review by Owner and Architect.
- C. Selection Samples: Submit manufacturer's standard color charts illustrating color and pattern design for each TCF product specified.
- D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- E. Manufacturer's Qualification Statement.
- F. Installer's Qualification Statement.
- G. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning.
- H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

1. See Section 016000 - Product Requirements, for additional provisions.
 2. Extra TCF Tiles: Quantity equal to 5 percent of total installed of each color and pattern installed, but not less than 1 full case.
- I. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing specified textile composite flooring. Manufacturer shall have a technical field representative available for field observation and inspection.
- B. Installer Qualifications: Company specializing in installing textile composite flooring, and complying with following:
1. Installer shall be a specialty contractor normally engaged in the installation of TCF flooring, with prior experience installing these floor materials. Flooring contractor shall submit a list of installers certified by TCF manufacturer prior to bid.
 2. Flooring contractor shall be responsible for proper product installation, including floor substrate testing and preparation, in accordance with manufacturer's requirements and specifications.

1.05 FIELD CONDITIONS

- A. Do not deliver or install until building is enclosed and HVAC system is operating at occupancy conditions.
- B. Store materials in area of installation for minimum period of 24 hours prior to installation.

1.06 WARRANTY

- A. Manufacturer's Warranty: The TCF warranty shall be the sole source responsibility of the manufacturer. Second source warranties or warranties that involve parties other than the TCF manufacturer are unacceptable.
1. Warranty Term: 3 years minimum.
 2. In the event of failure due to material or workmanship, the warranty shall cover either repair or removal and replacement at manufacturer's discretion.
 3. The warranty shall not exclude TCF installed on stairs, provided the product installation was approved by manufacturer's field representative during final inspection, and provide the product was properly maintained.
 4. Wear Layer Warranty: Shall specifically define and cover against the following:
 - a. Product performance.
 - b. Colorfastness to light and crocking.
 - c. Stain removal.
 - d. Static protection.
 - e. Zippering.
 5. Backing Layer Warranty: Shall specifically define and cover against the following:
 - a. Edge ravel.
 - b. Delamination.
 - c. Dimensional stability.
 6. A 'tuft bind' warranty in lieu of edge ravel and zippering is not acceptable.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Textile Composite Flooring ("TCF"):
 - 1. Basis-of-Design: Matter Surfaces; Trilogy Tile; "Portobello".
 - 2. J&J Flooring Group, Inc.; Kinetex.
 - 3. Patcraft; Walk Right In II.
 - 4. Tandus Centiva; Powerbond Hybrid Resilient.

2.02 PERFORMANCE CHARACTERISTICS

- A. The following performance characteristics shall be met by all products:
 - 1. Critical Radiant Flux: Minimum of 0.45 watts/sq cm, when tested in accordance with ASTM E648 or NFPA 253.
 - 2. Surface Flammability Ignition: Pass Federal Flammability CPSC FF 1-70 (also referenced as ASTM D2859 - the "pill test").
 - 3. Maximum Electrostatic Charge: Pass AATCC Test Method 134 (Step & Scuff): 3 Kv. or less at 20 percent relative humidity.
 - 4. Smoke Density: ASTM E662 / NFPA 258: < 450 Flaming Mode.
 - 5. Static Coefficient of Friction: Passes ADA Guidelines for Accessible Routes (Minimum 0.60).
 - 6. Lightfastness: AATCC Test Method 16: > 4 @ 100 hours.
- B. Low-Emitting Materials:
 - 1. Flooring Products: Flooring products shall be tested and determined compliant in accordance with CAL (CDPH SM).
 - 2. Adhesives and Sealants: Adhesives and sealants field-applied inside the weatherproofing system shall be tested and determined compliant in accordance with CAL (CDPH SM) AND shall meet the chemical content requirements of SCAQMD 1168.

2.03 MATERIALS

- A. Textile Composite Flooring, Type WM-1: Tufted textured loop, manufactured in one color dye lot.
 - 1. Tile Size: 20 by 20 inch, nominal.
 - 2. Thickness: 9/32 inch (7.2 mm).
 - 3. VOC Content: Provide CRI (GLP) certified product.
 - 4. Dye Method: Solution dyed.
 - 5. Wear Layer: Manufacturer's standard, polyester or nylon (6,6).
 - 6. Primary Backing Material: 100% polypropylene.

2.04 ACCESSORIES

- A. Edge Strips: Embossed aluminum, color as selected by Architect.
- B. Adhesive: Recommended by textile composite flooring manufacturer; releasable type.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that subfloor surfaces are smooth and flat within tolerances specified for that type of work and are ready to receive textile composite flooring.
- B. Verify that subfloor surfaces are dust-free and free of substances that could impair bonding of adhesive materials to subfloor surfaces.

3.02 PREPARATION

- A. Prepare floor substrates as recommended by flooring and adhesive manufacturers.
- B. Remove subfloor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with subfloor filler.
- C. Apply moisture vapor treatment (MVT) in accordance with manufacturer's instructions.
- D. Apply, trowel, and float filler to achieve smooth, flat, hard surface. Prohibit traffic until filler is cured.

3.03 INSTALLATION

- A. Starting installation constitutes acceptance of subfloor conditions.
- B. Install TCF in accordance with manufacturer's instructions.
- C. Cut TCF tile clean. Fit TCF tight to intersection with vertical surfaces without gaps.
- D. Lay TCF tile in square pattern, with pile direction parallel to next unit, set parallel to building lines.
- E. Locate change of color or pattern or transition trim between rooms under door centerline.
- F. Fully adhere TCF tile to substrate.
 - 1. Free-lay and stretch-in installations are not acceptable.
- G. Trim TCF neatly at walls and around interruptions.
- H. Complete installation of edge strips, concealing exposed edges.

3.04 FIELD QUALITY CONTROL

- A. Engage manufacturer's technical field representative to observe during substrate preparation and during installation, and to provide a final inspection after completion.
- B. Remove and replace TCF where manufacturer's field inspection indicates that installation is not in compliance with the specified requirements or with manufacturer's instructions.

3.05 CLEANING AND PROTECTION

- A. Remove excess adhesive without damage, from floor, base, and wall surfaces.
- B. Clean and vacuum TCF surfaces.
- C. Protect installed TCF from heavy construction traffic, soiling, and damage for the remainder of the construction period.

END OF SECTION 096817